

**DIVISION OF ENVIRONMENTAL HEALTH
SOLID WASTE PROGRAM
610 UNIVERSITY AVENUE
FAIRBANKS, AK 99709-3643**
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File Number: 475.15.010

November 5, 1998

CERTIFIED MAIL - RETURN RECEIPT REQUESTED # Z 599 234 807

Mr. John Key, General Manager
Cominco Alaska, Inc.
P.O. Box 1230
Kotzebue, AK 99752

**Re: Cominco Red Dog Mine Camp Solid Waste Landfill Permit #9832-BA005,
Renewal of Permit #9632-BA002**

Dear Mr. Key:

The Department of Environmental Conservation has completed its evaluation of your request to renew your solid waste disposal permit, to allow for the operation and maintenance of a Class III municipal solid waste landfill for the disposal of incinerated camp wastes, ash, sewage sludge, and construction/demolition debris at the Cominco Alaska, Inc. Red Dog Mine. The site is located in the Delong Mountains Regional Transportation System in the NW 1/4, NW 1/4, of Section 29, T.31N., R.18W., Kateel River Meridian. The Department is issuing this permit in accordance with AS 46, 18 AAC 15, and 18 AAC 60. Please review the conditions and stipulations in the permit and ensure they are all understood. This permit is effective upon issuance and expires October 31, 2003.

The conditions and stipulations for site development, burial, burning and closure have been changed to comply with revised solid waste regulations that went into effect October 29, 1998. These changes include a 10-foot separation from groundwater, intermediate cover for inactive areas, land records, and post-closure reporting requirements.

John Key

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November 5, 1998

Any person who disagrees with this decision may appeal the decision by requesting an adjudicatory hearing, using the procedures contained in 18 AAC 15.200-310. Hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 105, Juneau, Alaska 99801-1795, within 30 days of receipt of this letter. If a hearing is not requested within 30 days, the right to appeal is waived. Please also send a copy of the request to the undersigned.

Sincerely,

Kris McCumby for
Heather Stockard
Solid Waste Program Manager

NS/KM/mlg (EH/SW/FBKS - K:\EH\SW\1998\9832-005.doc)

Encl: * Permit 9832-BA005

cc w/encl: Trustees for Alaska
Jacqueline Lundberg/Cominco, Inc.
bcc w/encl: Heather Stockard, ADEC/Juneau

**ALASKA DEPARTMENT
OF
ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL HEALTH
610 UNIVERSITY AVENUE
FAIRBANKS, ALASKA 99709-3643

SOLID WASTE DISPOSAL PERMIT**

Permit: **9832-BA005**

Date: November 5, 1998

This Solid Waste Disposal Permit is issued to Cominco Alaska, Inc., for the operation and maintenance of a Class III municipal solid waste landfill for the disposal of incinerated camp wastes, ash, sewage sludge, empty, damaged drums, and construction/demolition debris at the Cominco Alaska Red Dog Mine Port Site, Alaska. The landfill is located in the Delong Mountain Transportation System in the NW 1/4, NW 1/4, of Section 29, T.31N., R.18W., Kateel River Meridian. This permit is subject to the conditions and stipulations contained in Appendices A and B which are incorporated herein by reference.

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This permit is issued under provisions of Alaska Statute 46.03, the Alaska Administrative Code, as amended or revised, and other applicable State laws and regulations.

This permit is effective upon issuance and expires October 31, 2003. It may be terminated or modified in accordance with AS 46.03.120.

Kris McCumby for
Heather Stockard
Solid Waste Program Manager

APPENDIX A - SPECIFIC CONDITIONS

I. SITE DEVELOPMENT

The permit holder shall:

- A. Comply with the designs and plans in the renewal application dated October 1, 1998 including the Operations Plan, Closure Plan, Monitoring Plan and Waste Minimization and Recycling Plan, and the amendments dated October 19, 1998, as well as the following permit conditions. Additional modification may be requested by the permittee, but must be authorized by a permit amendment, before that modification is effective.
- B. Ensure that all operations will accommodate the waste volume and are done in a manner that will facilitate landfill closure.
- C. Erect and maintain a readily visible sign at the site currently in use with the following information legibly printed:

Facility Operator Identification
Operator/Owner Name
Conditions for Use
Emergency Phone Numbers

- D. Ensure that surface water runoff from outside the facility does not flow onto the facility and over, into, or through uncovered or covered solid wastes by constructing and maintaining diversion structures, such as ditches or berms.
- E. Erect and maintain a sign at the entrance to the site that lists items that may not be disposed of there such as: acids, corrosives, solvents, oily wastes, explosives, hazardous wastes, radioactive wastes, or unsterilized medical waste.
- F. Ensure that the site is managed in such a way as to prevent attracting wildlife, or domestic animals to the facility. Wastes will be stored in suitable containers prior to incineration, open burning, or placement in the disposal cell to reduce wildlife attraction.
- G. Construct the solid waste disposal area and maintain it in a manner that will allow for construction of a fence, if necessary, to control wildlife access. When in the judgement of the Department of Fish and Game, attraction of wildlife to the site becomes significant; a fence will be constructed around the solid waste disposal area. The fence must meet specifications to be agreed upon by Cominco, ADF&G,

and ADEC to adequately exclude carnivores.

I. SITE DEVELOPMENT (Cont.)

- H. Ensure that a minimum ten-foot separation distance is maintained between the bottom of the waste disposal trench and the high groundwater level or at least two feet above the natural ground surface.
- I. Ensure that only ash, incinerator residue, construction/demolition waste, cleaned and crushed non-recyclable barrels, and sewage sludge are disposed of at this site.

II. SITE OPERATION

The permit holder shall:

A. Burial

- 1. Consolidate and compact all loose refuse and cover with a minimum of six inches of compacted soil weekly. More frequent cover may be necessary if blowing litter becomes a nuisance.
- 2. Ensure the wastes placed in the disposal cell are compacted in two-foot increments, with a minimum of five passes of the bulldozer/ compaction equipment.
- 3. Apply at least 12 inches of intermediate soil cover to any portion of the landfill that will be inactive for a period of 90 days or more. The intermediate cover must be applied within seven days after the waste is last deposited in the inactive area, and graded to prevent water from ponding.
- 4. Maintain a separation distance of 50 feet between the designated disposal area and the property boundary.
- 5. Ensure that the maximum disposal cell working face does not exceed **20 feet** in width and the height of the working faces does not exceed **5 feet**.
- 6. Ensure the working face is kept as small as practical to reduce the potential for windblown litter and for the attraction of birds and animals.
- 7. Ensure that waste oils or oily wastes are managed in accordance with 40 CFR 279. Oil filters must be hot drained and crushed or incinerated prior to disposal.

A. Burial (Cont.)

8. Ensure that all large, non-recyclable containers (e.g., cleaned barrels or drums) are crushed and flattened to prevent voids in the fill. All fluids removed from containers prior to their disposal will be properly disposed of in accordance with all applicable State and Federal laws, including but not limited to, RCRA, the Clean Water Act, the Clean Air Act, Title 46 of Alaska Statutes and 18 AAC 60.
9. Ensure that scrap vehicles or automobiles have been drained of all petroleum products and coolants, and the lead-acid batteries have been removed prior to disposal at the site.
10. Ensure that tires are returned to the distributor or are recapped. Those tires that cannot be returned or recapped may be placed in a separate area of the landfill for disposal.
11. Ensure leachate or eroded soil from the facility does not cause a violation of the water quality standards set out in 18 AAC 70.
12. Ensure all personnel who work within the landfill are familiar with the location of the various disposal areas (e.g., the active disposal area, open burn areas, and sewage sludge disposal area) as well as the pertinent rules for use of the facility. A sign with this information shall be placed in a central location, such as the area of the municipal waste incinerator.

B. Burning

1. Prohibit open burning on the working face and immediately extinguish any fires that occur on the working face. Notify the Department of Environmental Conservation, Fairbanks Office, at 451-2360, if any fires occur on the working face.
2. Prohibit items that generate black smoke from being burned, such as tires and plastics. Open burning shall comply with air quality regulations in 18 AAC 50 and all other applicable state and federal regulations.
3. Ensure that open burning of wood, paper and paper products are kept at least 100 feet from the working face. Burning shall be done in a burn box, burn cage, or other means of ensuring controlled burning that prevents fires in the landfill area. Open burning requires that best combustion efficiency be achieved with no smoldering of wastes.

B. Burning (Cont.)

4. Ensure an attendant is on duty when open burning occurs at the landfill.
5. Burn putrescible camp wastes in an incinerator complying with 18 AAC 50.040 (b). No more than one ton of ash may be placed in the landfill per day for the landfill to qualify as a Class III facility.

C. Access

1. Construct and maintain on-site roads as necessary to ensure adequate traffic control. Adequate traffic control means that the site supervisor will maintain positive control of all persons who are within the landfill boundaries, and that refuse will be deposited in approved locations. Dumping in unauthorized areas violates conditions of this permit and Alaska Administrative Codes.

D. Litter

1. Collect all windblown and littered refuse from the disposal site and along the entrance road at least **once each month** during summer months and return it to the active disposal area for burial. All littered wastes on lands within 500 feet of the site, whether windblown or dumped, will be collected and disposed of at a frequency necessary to prevent this litter from becoming an aesthetic nuisance.

E. Snow Control

1. Remove snow where possible from the disposal cell operations area prior to spring snowmelt.
2. Deposit any snow removed in an area away from the landfill working face within the landfill and clean up any accumulated litter in that area after the snow melts.
3. Erect snow fences or berms, as necessary, to control drifting snow.

III. PROHIBITIONS AND SPECIAL RESTRICTIONS

The permit holder shall:

- A. Prohibit discharge of firearms at the facility.

III. PROHIBITIONS AND SPECIAL RESTRICTIONS (Cont.)

- B. Prohibit disposal of hazardous wastes, as defined in 40 CFR 261.3, oily wastes, waste oil, greases, paints, sludges, and chemical wastes at this facility unless written permission is obtained from the Department.
- C. Prohibit disposal of lead-acid vehicle batteries at this site. Batteries may be stored temporarily in a designated area in covered, leak-proof storage containers prior to their transport to a recycler or permitted disposal site.
- D. Prohibit regular disposal of salvageable or recyclable materials, including, but not limited to, prefabricated buildings, vehicles, drums, tankage, tires, major equipment components, and major scrap components.
- E. Prohibit disposal of putrescible wastes which have not been incinerated, unless prior written permission is received from the Department.
- F. Prohibit disposal of contaminated soil which contains metals or other chemicals in concentrations which the Department determines poses an unacceptable risk to human health or the environment. Prohibit disposal of contaminated soils which exceed the following criteria:

Diesel Range Organics	100.0 mg/l
Gasoline Range Organics	50.0 mg/l
Benzene	0.1 mg/l
BTEX	10.0 mg/l

- G. Prohibit disposal of regulated asbestos containing materials at this site.

IV. MONITORING AND REPORTING

The permit holder shall:

- A. Visually monitor the site each month for signs of damage or potential damage from settlement, ponding, leakage, erosion, or operations at the site. Retain the results of visual monitoring in the operating record for the facility. Make copies of these records available to the Department upon request.
- B. Maintain a set of site development and use plans and submit an updated copy to the Department showing current status of site development on the anniversary date of the permit (October 31) each year.

IV. MONITORING AND REPORTING (Cont.)

C. Photograph the disposal site:

1. As prepared for waste disposal.
2. During waste deposition at least once per year.
3. After final cover has been applied.
4. After revegetation during the summer following closure.

Photos taken under 1, 2, and 3 should be submitted within 60 days of closure, and photos under 4, within one (1) year of closure.

- D. Determine the quality and origin of any waters found leaching from the site. Data collected may be used to determine if further investigation and treatment of the water is necessary prior to the disposal of the water into the tailings impoundment.
- E. Notify the Department within 48 hours of any known monitoring data indicating that contamination may be coming from the site. A written notice regarding the contamination shall follow within two weeks of the discovery.

V. SEWAGE SLUDGE DISPOSAL

The permit holder shall:

- A. Prior to disposal at the site, ensure that the sewage sludge is non-hazardous by testing it using the Toxicity Characteristic Leaching Procedure (TCLP) test (EPA Method 1311) and ensuring that it passes the Paint Filter Liquids Test (EPA Method 9095).
- B. Collect sewage sludge samples using a quality assurance/quality control (QA/QC) plan for collection and approved by the Department. Sample analyses shall be done by a laboratory for which a QA/QC plan has been submitted and approved by the Department.
- C. Retain copies of sewage sludge analyses in the Operating Record for the facility and make them available to the Department for review during facility inspections or upon request by the Department.
- D. Ensure the sewage sludge is treated with lime, covered at once, or otherwise managed to prevent health hazards and odor nuisances.

VI. CLOSURE AND RESTORATION

The permit holder shall:

- A. Notify the Department's Fairbanks/Northern Office at least thirty (30) days before the site is to be permanently closed and the equipment withdrawn.
- B. Ensure that a final cover is applied within 90 days after the last waste is deposited, and consists of two (2) to four (4) feet of material. The top six inches will consist of soil that will promote adequate water retention for the successful revegetation of the site with native vegetation or grasses.
- C. Develop a vegetative cover plan for closed area within the first growing season using plant species recommended by the Alaska Plant Materials Center (907) 745-4469.
- D. Ensure that the covered areas and drainage control structures are graded to promote and maintain surface water runoff, to prevent ponding and erosion, and to minimize the amount of water entering the solid waste.
- E. Prepare a survey as-built or record drawings showing the location, volume and type of waste deposited at the solid waste disposal site, and a legal description of the landfill property which would be found during a title search. Submit the as-built to the ADEC Solid Waste Program, Fairbanks Office, within 60 days of the final closure or expiration date of this permit.
- F. Within 60 days after the entire facility is permanently closed to landfilling, file the survey as-built or record drawings of the area used as a landfill with the appropriate Division of Land Recorder's Office. At the same time, file a notation informing future property owners that use of the land may not disturb the integrity of the final cover, cap, or other structures or devices installed as part of closure, unless approved by the Department. Submit proof of these recordings to this Department.
- G. Visually monitor the site annually for the first five (5) years following facility closure for signs of damage or potential damage from settlement, ponding, leakage, erosion, or lack of success with revegetation at the site. Complete additional surface restoration work if significant problems have occurred within the post-closure period.

- H. Submit a report to the Department at the end of the 5-year post-closure period, that contains
 - 1. photographs of the facility; and
 - 2. a description of any problems detected and corrective actions taken during post-closure visual monitoring.

APPENDIX B - GENERAL PERMIT CONDITIONS

I. ACCESS AND INSPECTION

The permittee shall allow the Commissioner or her/his representative access to the permitted facilities at reasonable times to conduct scheduled or unscheduled inspections or tests to determine compliance with this permit, State laws, and regulations.

II. INFORMATION ACCESS

Except for information relating to confidential processes or methods of manufacture, all records and reports submitted in accordance with the terms of this permit shall be available for public inspection at the State of Alaska Department of Environmental Conservation, Fairbanks Office, 610 University Avenue, Fairbanks, Alaska 99709-3643.

III. CIVIL AND CRIMINAL LIABILITY

Nothing in this permit shall relieve the permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond his control, including, but not limited to, accidents, equipment breakdowns, or labor disputes.

IV. AVAILABILITY

The permittee shall post or maintain a copy of this permit available to the public at the disposal facility.

V. ADVERSE IMPACT

The permittee shall take all necessary means to minimize any adverse impacts to the receiving waters or lands resulting from noncompliance with any limitation specified in this permit, including any additional monitoring needed to determine the nature and impact of the noncomplying activity. The permittee shall clean up and restore all areas adversely impacted by the noncompliance.

VI. CULTURAL OR PALEONTOLOGICAL RESOURCES

Should cultural or paleontological resources be discovered as a result of this activity, work which would disturb such resources is to be stopped, and the State Historic Preservation Office, Division of Parks and Outdoor Recreation, Department of Natural Resources, is to be notified immediately (907-269-8721).

VII. APPLICATIONS FOR RENEWAL

In accordance with 18 AAC 15.100(d), applications for renewal or amendment of this permit must be made no later than 30 days before the expiration date of the permit or the planned effective date of the amendment.

VIII. OTHER LEGAL OBLIGATIONS

The requirements, duties, and obligations set forth in this permit are in addition to any requirements, duties, or obligations contained in any permit that the Alaska Department of Environmental Conservation or the U.S. Environmental Protection Agency has issued or may issue to the permittee. This permit does not relieve the permittee from the duty to obtain any and all necessary permits and to comply with the requirements contained in any such permit or with applicable state and federal laws and regulations. All activities conducted by the permittee pursuant to the terms of this permit and all plans implemented by the permittee pursuant to the terms of this permit shall comply with all applicable state and federal laws and regulations.

IX. POLLUTION PREVENTION

In order to prevent and minimize present and future pollution, when making management decisions that affect waste generation, the permittee shall consider the following order of priority options: waste source reduction; recycling of waste; waste treatment; and waste disposal.